

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (canceled)
2. (currently amended) ~~The device according to claim 1, further comprising: An active matrix addressing LCD device comprising:~~  
an active matrix substrate having a transparent, dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;  
gate electrodes of the TFTs having a first multilevel conductive structure;  
scan lines connected to the corresponding gate electrodes and having the first multilevel conductive structure;  
common electrodes formed on the plate to be opposite to [[the]] corresponding ones of said pixel electrodes; and  
common lines formed on the plate to be connected to [[the]] corresponding ones of said common electrodes;  
the first multilevel conductive structure including a TiN film located at a top of the first multilevel conductive structure, an Al-based film located below the TiN film, and at

least one Ti film located at at least one of an upper position  
and a lower position with respect to the Al-based film;

the TiN film of the first multilevel conductive  
structure having a nitrogen concentration of 25 atomic % or  
higher;

the common electrodes and the common lines having a  
second multilevel conductive structure;

the second multilevel conductive structure including a  
TiN film located at a top of the second multilevel conductive  
structure, an Al-based film located below the TiN film, and at  
least one Ti film located at at least one of an upper position  
and a lower position with respect to the Al-based film; and

the TiN film of the second multilevel conductive  
structure having a nitrogen concentration of 25 atomic % or  
higher.

3. (canceled)

4. (original) The device according to claim 2, wherein  
each of the common lines has a terminal at its end for electrical  
connection to an external circuit;

and wherein the TiN film is exposed from the second  
multilevel conductive structure at the terminal.

5. (canceled)

6. (currently amended) ~~The device according to claim 1,~~ An active matrix addressing LCD device comprising:

an active matrix substrate having a transparent, dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;

gate electrodes of the TFTs having a first multilevel conductive structure;

scan lines connected to the corresponding gate electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a TiN film located at a top of the first multilevel conductive structure, an Al-based film located below the TiN film, and at least one Ti film located at at least one of an upper position and a lower position with respect to the Al-based film; and

the TiN film of the first multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher,

wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the bottom.

7. (currently amended) ~~The device according to claim 1,~~  
An active matrix addressing LCD device comprising:

an active matrix substrate having a transparent,  
dielectric plate, thin-film transistors (TFTs) arranged on the  
plate, and pixel electrodes arranged on the plate;

gate electrodes of the TFTs having a first multilevel  
conductive structure;

scan lines connected to the corresponding gate  
electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a  
TiN film located at a top of the first multilevel conductive  
structure, an Al-based film located below the TiN film, and at  
least one Ti film located at at least one of an upper position  
and a lower position with respect to the Al-based film; and

the TiN film of the first multilevel conductive  
structure having a nitrogen concentration of 25 atomic % or  
higher,

wherein the first multilevel conductive structure is a  
three-level structure formed by the TiN film located at the top,  
the Al-based film located at the middle, and the Ti film located  
at the bottom.

8. (currently amended) ~~The device according to claim 1,~~

An active matrix addressing LCD device comprising:

an active matrix substrate having a transparent,  
dielectric plate, thin-film transistors (TFTs) arranged on the  
plate, and pixel electrodes arranged on the plate;

gate electrodes of the TFTs having a first multilevel  
conductive structure;

scan lines connected to the corresponding gate  
electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a  
TiN film located at a top of the first multilevel conductive  
structure, an Al-based film located below the TiN film, and at  
least one Ti film located at at least one of an upper position  
and a lower position with respect to the Al-based film; and

the TiN film of the first multilevel conductive  
structure having a nitrogen concentration of 25 atomic % or  
higher,

wherein the first multilevel conductive structure is a four-level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

9. (original) The device according to claim 2,

wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the bottom.

10. (original) The device according to claim 2, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Al-based film located at the middle, and the Ti film located at the bottom.

11. (original) The device according to claim 2, wherein the first multilevel conductive structure is a four-level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

12-14. (canceled)

15. (currently amended) ~~The device according to claim 12, An active matrix addressing LCD device comprising:~~  
~~an active matrix substrate having a transparent, dielectric plate, thin-film transistors (TFTs) arranged on the~~

plate, and pixel electrodes arranged on the plate;  
source electrodes of the TFTs having a first multilevel  
conductive structure;  
drain electrodes of the TFTs having the first  
multilevel conductive structure;  
signal lines connected to the corresponding source  
electrodes and having the first multilevel conductive structure;  
the first multilevel conductive structure including a  
TiN film located at a top of the structure, an Al-based film  
located below the TiN film, and at least one Ti film located at  
at least one of an upper position and a lower position with  
respect to the Al-based film; and  
the TiN film of the first multilevel conductive  
structure having a nitrogen concentration of 25 atomic % or  
higher, wherein each of the TFTs comprises a gate insulating film  
formed to cover the gate electrode, a semiconductor island formed  
on the gate insulating film, a source electrode formed on the  
island, a drain electrode formed on the island to form a channel  
gap between the drain electrode and the source electrode.

16. (currently amended) ~~The device according to claim~~  
12, An active matrix addressing LCD device comprising:  
an active matrix substrate having a transparent,

dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;

source electrodes of the TFTs having a first multilevel conductive structure;

drain electrodes of the TFTs having the first multilevel conductive structure;

signal lines connected to the corresponding source electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at at least one of an upper position and a lower position with respect to the Al-based film; and

the TiN film of the first multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the bottom.

17. (currently amended) ~~The device according to claim 12, An active matrix addressing LCD device comprising:~~

an active matrix substrate having a transparent,

dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;

source electrodes of the TFTs having a first multilevel conductive structure;

drain electrodes of the TFTs having the first multilevel conductive structure;

signal lines connected to the corresponding source electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at at least one of an upper position and a lower position with respect to the Al-based film; and

the TiN film of the first multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Al-based film located at the middle, and the Ti film located at the bottom.

18. (currently amended) ~~The device according to claim 12, An active matrix addressing LCD device comprising:~~

an active matrix substrate having a transparent,

dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;

source electrodes of the TFTs having a first multilevel conductive structure;

drain electrodes of the TFTs having the first multilevel conductive structure;

signal lines connected to the corresponding source electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at at least one of an upper position and a lower position with respect to the Al-based film; and

the TiN film of the first multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher, wherein the first multilevel conductive structure is a four-level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

19. (currently amended) ~~The device according to claim 13, An active matrix addressing LCD device comprising:~~

an active matrix substrate having a transparent, dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;

source electrodes of the TFTs having a first multilevel conductive structure;

drain electrodes of the TFTs having the first multilevel conductive structure;

signal lines connected to the corresponding source electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at at least one of an upper position and a lower position with respect to the Al-based film; and

the TiN film of the first multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher,

wherein the pixel electrodes have the first multilevel conductive structure, and

wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the bottom.

20. (currently amended) ~~The device according to claim 13,~~ An active matrix addressing LCD device comprising:

an active matrix substrate having a transparent, dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;

source electrodes of the TFTs having a first multilevel conductive structure;

drain electrodes of the TFTs having the first multilevel conductive structure;

signal lines connected to the corresponding source electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at at least one of an upper position and a lower position with respect to the Al-based film; and

the TiN film of the first multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher,

wherein the pixel electrodes have the first multilevel conductive structure, and

wherein the first multilevel conductive structure is a

three-level structure formed by the TiN film located at the top, the Al-based film located at the middle, and the Ti film located at the bottom.

21. (currently amended) ~~The device according to claim 13,~~ An active matrix addressing LCD device comprising:

an active matrix substrate having a transparent, dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;

source electrodes of the TFTs having a first multilevel conductive structure;

drain electrodes of the TFTs having the first multilevel conductive structure;

signal lines connected to the corresponding source electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at at least one of an upper position and a lower position with respect to the Al-based film; and

the TiN film of the first multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher,

wherein the pixel electrodes have the first multilevel conductive structure, and

wherein the first multilevel conductive structure is a four-level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

22. (original) An active matrix addressing LCD device comprising:

an active matrix substrate having a transparent, dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;

gate electrodes of the TFTs having a first multilevel conductive structure;

scan lines connected to the corresponding gate electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at at least one of an upper position and a lower position with respect to the Al-based film;

the TiN film of the first multilevel conductive

structure having a nitrogen concentration of 25 atomic % or higher;

source electrodes of the TFTs having a second multilevel conductive structure;

drain electrodes of the TFTs having the second multilevel conductive structure;

signal lines connected to the corresponding source electrodes and having the second multilevel conductive structure;

the second multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at an upper position or both an upper position and a lower position with respect to the Al-based film; and

the TiN film of the second multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher.

23. (original) The device according to claim 22, further comprising:

common electrodes formed on the plate to be opposite to the corresponding pixel electrodes; and

common lines formed on the plate to be connected to the corresponding common electrodes;

wherein the common electrodes and the common lines have the first multilevel conductive structure.

24. (original) The device according to claim 22, wherein the pixel electrodes have the first multilevel conductive structure.

25. (original) The device according to claim 23, wherein the pixel electrodes have the first multilevel conductive structure.

26. (original) The device according to claim 22, wherein each of the scan lines has a terminal at its end for electrical connection to an external circuit;

and wherein the TiN film is exposed from the first multilevel conductive structure at the terminal.

27. (original) The device according to claim 23, wherein each of the common lines has a terminal at its end for electrical connection to an external circuit;

and wherein the TiN film is exposed from the second multilevel conductive structure at the terminal.

28. (original) The device according to claim 22,

wherein each of the TFTs comprises a gate insulating film formed to cover the gate electrode, a semiconductor island formed on the gate insulating film, a source electrode formed on the island, a drain electrode formed on the island to form a channel gap between the drain electrode and the source electrode.

29. (original) The device according to claim 22, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the bottom.

30. (original) The device according to claim 22, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Al-based film located at the middle, and the Ti film located at the bottom.

31. (original) The device according to claim 22, wherein the first multilevel conductive structure is a four-level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

32. (original) The device according to claim 23, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the bottom.

33. (original) The device according to claim 23, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Al-based film located at the middle, and the Ti film located at the bottom.

34. (original) The device according to claim 23, wherein the first multilevel conductive structure is a four-level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

35. (original) An active matrix addressing LCD device comprising:

an active matrix substrate having a transparent, dielectric plate, thin-film transistors (TFTs) arranged on the plate, and pixel electrodes arranged on the plate;

gate electrodes of the TFTs having a first multilevel conductive structure;

scan lines connected to the corresponding gate electrodes and having the first multilevel conductive structure;

the first multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at at least one of an upper position and a lower position with respect to the Al-based film;

the TiN film of the first multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher;

source electrodes of the TFTs having a second multilevel conductive structure;

drain electrodes of the TFTs having the second multilevel conductive structure;

signal lines connected to the corresponding source electrodes and having the second multilevel conductive structure;

the second multilevel conductive structure including a TiN film located at a top of the structure, an Al-based film located below the TiN film, and at least one Ti film located at an upper position or both an upper position and a lower position with respect to the Al-based film; and

the TiN film of the second multilevel conductive structure having a nitrogen concentration of 25 atomic % or higher.

36. (original) The device according to claim 35, further comprising:

common electrodes formed on the plate to be opposite to the corresponding pixel electrodes; and

common lines formed on the plate to be connected to the corresponding common electrodes;

wherein the common electrodes and the common lines have the first multilevel conductive structure.

37. (original) The device according to claim 35, wherein the pixel electrodes have the second multilevel conductive structure.

38. (original) The device according to claim 35, wherein each of the scan lines has a terminal at its end for electrical connection to an external circuit;

and wherein the TiN film is exposed from the first multilevel conductive structure at the terminal.

39. (original) The device according to claim 35, wherein each of the signal lines has a terminal at its end for electrical connection to an external circuit;

and wherein the TiN film is exposed from the second multilevel conductive structure at the terminal.

40. (original) The device according to claim 36, wherein each of the common lines has a terminal at its end for electrical connection to an external circuit;

and wherein the TiN film is exposed from the first multilevel conductive structure at the terminal.

41. (original) The device according to claim 35, wherein each of the TFTs comprises a gate insulating film formed to cover the gate electrode, a semiconductor island formed on the gate insulating film, a source electrode formed on the island, a drain electrode formed on the island to form a channel gap between the drain electrode and the source electrode.

42. (original) The device according to claim 35, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the

bottom.

43. (original) The device according to claim 35, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Al-based film located at the middle, and the Ti film located at the bottom.

44. (original) The device according to claim 35, wherein the first multilevel conductive structure is a four-level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

45. (original) The device according to claim 35, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the bottom.

46. (original) The device according to claim 35, wherein the first multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the

Al-based film located at the middle, and the Ti film located at the bottom.

47. (original) The device according to claim 35, wherein the first multilevel conductive structure is a four-level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

48. (original) The device according to claim 35, wherein the second multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the bottom.

49. (original) The device according to claim 35, wherein the second multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Al-based film located at the middle, and the Ti film located at the bottom.

50. (original) The device according to claim 35, wherein the second multilevel conductive structure is a four-

level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

51. (original) The device according to claim 35, wherein the second multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Ti film located at the middle, and the Al-based film located at the bottom.

52. (original) The device according to claim 35, wherein the second multilevel conductive structure is a three-level structure formed by the TiN film located at the top, the Al-based film located at the middle, and the Ti film located at the bottom.

53. (original) The device according to claim 35, wherein the second multilevel conductive structure is a four-level structure formed by the TiN film located at the top, the Ti film located at the upper middle, the Al-based film located at the lower middle, and the Ti film located at the bottom.

REMARKS

The application has been amended to place the application in condition for allowance at the time of the next Official Action.

Claims 1-53 were previously pending in the application. Claims 1, 3, 5 and 12-14 are canceled, leaving claims 2, 4, 6-11 and 15-53 for consideration.

Applicants would like to thank the Examiner for indicating that claims 22-53 are allowed and that claims 2, 4, 6-11 and 15-21 are allowable. In reliance thereon, claims 2, 6-8 and 15-21 are rewritten in independent form.

The rejection of claims 1, 3, 5 and 12-14 over KIMURA et al. 6,632,696 is believed moot in view of claims 1, 3, 5 and 12-14 being canceled.

Since the claims remaining in the application are indicated as allowable, and since there are believed no outstanding formal matters, the application is believed in condition for allowance. An early notification of allowance is respectfully requested.

Please charge the fee of \$1,800 for the nine extra independent claims added herewith to Deposit Account No. 25-0120.